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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/960,292 | 09/24/2001 | Fabrice Lecomte | 612.40667X00 | 4766 |

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EXAMINER

MANOHARAN, VIRGINIA

ART UNIT PAPER NUMBER

1764

DATE MAILED: 07/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/960,292

Applicant(s)

LECOMTE ET AL.

Examiner

Virginia Manoharan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12-21-01.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.

- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

The abstract of the disclosure is objected to because of the inclusion of legal phraseology often used in patent claims such as "comprising" recited in line 2. Correction is required. See MPEP § 608.01(b).

The specification has not been checked to the extent necessary to determine the presence of all possible minor errors e.g., typographical, grammar, idiomatic, syntax and etc. Applicants' cooperations are requested in correcting any errors of which applicants may become aware in the specification.

The disclosure is objected to because of the following informalities: Note typographical errors 1) "vapour", recited e.g., in claim 9, last line, should be -- vapor -- as the latter is the term normally used in the U.S; and "us sed" in claim 14, line 2.

Appropriate correction is required.

Claims 1-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. There are no proper antecedent basis for supports in the claims for the following recitations:

1. "the liquid recycled to state b) recited in claim 7 (that the liquid is recycled to stage b is not initially recited in the base claim 1);
2. "stage d)" in claims 5 and 8;

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3. "the heat of the liquid phase obtained in stage b)" in claim 10; and
 4. "the energy recovered from the expander" in claim 5.
- b. The phrase "gas phase" should be – vaporous phase – if the material is liquid at normal conditions.
- c. The inconsistent used of terminology in the claims is improper. For example : "gas phases" in claim 5, line 2 which is plural as opposed to "gas phase" in claim 1, stage c) which is singular. See also the gas phases recited in claim 8, line 1.
- d. Claim 1 recites only up to stage c). Claim 9, however, dependent on claim 1, jumps to stage f).
- e. In claim 14, line 1, "a distillation column" should be – the distillation column- since claim 1 already recites "a distillation column" in line 5.
- f. It is unclear whether the "a gas phase" in claim 7 is the same or different e.g., from "a gas phase" recited in claim 1, last two lines.
- g. The claims or at least part of the claims do not recite positive, explicit, physical, process steps but recite passive terms which makes the actual steps vague and indefinite. Note e.g., the recitation in claim 1 of "the natural gas is cooled to produce ..."

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5, 8-11 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bacon (4,128,410)or Tomlinson et al (4,846,863).

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Either Bacon or Tomlinson discloses the a process for treating a gas comprising

- a) the natural gas is cooled to produce a liquid phase and a gas phase,
- b) the gas phase obtained in stage a) is contacted in a distillation column with a liquid phase obtained in stage c) to produce a gas phase and a liquid phase,
- c) the gas phase obtained in stage b) is cooled to produce a liquid phase and a gas phase as broadly claimed in claim 1

See e.g., cols. 3-12 of Bacon and the claims at cols 9-10 of Tomlinson et al. The process of Bacon or Tomlinson differs from the claimed invention in that the preamble of claim 1 for example, recites "pretreating a natural gas under pressure containing hydrocarbons, at least one of the acid compounds hydrogen sulfide and carbon dioxide, and water".

However, this difference does not constitute a patentable distinction inasmuch as the preamble may or may not even be given patentable weight. Also, by now it is well -settled that the material may be new or unobvious but it does not impart patentability o the process of Bacon or Tomlinson. See In re Durden et al 226 USPQ 359.

Claims 6-7 and 12-15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Strum discloses a process for separating methane in a natural gas.
- b. Lee et al discloses an enhanced NGL recovery process.
- c. Streich discloses a process for the fractionation of natural gas

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d. Bucklin discloses a method for treating hydrocarbon gases for condensate recovery.


E. Ueno et al discloses a gas liquefying method.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Virginia Manoharan whose telephone number is 703-308-3844. The examiner can normally be reached on Tuesday-Friday from 7:30 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on 703-308-4311. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9462 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

V. Manoharan/mn
July 4, 2003


VIRGINIA MANOHARAN
PRIMARY EXAMINER
ART UNIT 1764
7/4/03